

November 8, 2010

Water Docket Environmental Protection Agency Mailcode: 28221T 1200 Pennsylvania Ave., NW. Washington, DC 20460

RE: Proposed Chesapeake Bay TMDLs, Docket ID No. EPA-Ro3- OW-2010-0736, 75 Fed. Reg.

57776 (Sept. 22, 2010).

The following comments are submitted on behalf of Earthjustice, D.C. Environmental Network, Potomac Riverkeeper, Shenandoah Riverkeeper, and Waterkeeper Alliance.

We strongly support establishment of TMDLs for Chesapeake Bay. TMDLs are mandated by the Clean Water Act ("CWA" or "the Act"), and are long overdue. We have the following comments on the above-referenced proposal.

- 1. Loads Based on Proposed Standards: The proposed TMDLs are based on proposed state water quality standards. The Act requires TMDLs to implement the "applicable" water quality standards, which are those adopted and in effect for each state. 33 U.S.C. 1313(d). Accordingly, the final TMDLs must reflect loads that are sufficiently stringent to implement the EPA-approved water quality standards that are in effect for each state at the time the TMDLs are finalized.
- 2. Reasonable Assurances: EPA's proposal to rely on voluntary as well as mandatory programs to provide "reasonable assurance" that nonpoint source load allocations will be achieved is unlawful and arbitrary. The Act requires TMDLs to be adequate to implement all applicable water quality standards. It does not allow EPA to make such implementation optional via reliance on voluntary programs. Further, it is arbitrary and irrational for EPA to find that voluntary programs provide any assurance at all much less reasonable assurance that nonpoint load allocations will be achieved. EPA and the Chesapeake Bay states have relied on voluntary nonpoint source control programs for decades, and the result as the proposed TMDL document itself concedes is failure to achieve anything close to the nonpoint load reductions needed to implement water quality standards.

EPA also incorrectly asserts (at 7-1) that the existence of the NPDES regulatory program and issuance of NPDES permits provides the requisite reasonable assurance that the WLAs in the TMDL will be achieved. The mere existence of the NPDES program and issuance of permits has already proven ineffective because of the states' failure in practice to include enforceable limits that implement existing TMDLs. Moreover, the existence of these programs will not provide reasonable assurances unless EPA commits to rigorous oversight and implementation of the program and permits to ensure that each permit contains enforceable limits that implement the TMDLs. EPA itself has refused to include strong, enforceable language for TMDL implementation in EPA-issued NPDES permits for MS4 systems, and absent such language there is no assurance that WLAs for such systems will be achieved.

3. Evaluation of State WIPs: EPA irrationally and incorrectly classifies the District of Columbia's WIP as having "some" rather than "serious" deficiencies. The proposed WIP provides for only 60% of the sediment reductions needed to meet the TMDL's 2025 target. DC WIP at 17. A plan that fails to provide for almost half of the reductions needed to implement the TMDL is severely deficient, and warrants imposition of the full range of federal backstop measures. At the very least, given that a major portion of the District's sediment load is from MS4 discharges, EPA must require the same or greater level of pollution control for urban MS4 lands as EPA has proposed for moderate and high-level backstop states. Moreover, to the extent this shortfall is attributable to deficiencies in the Maryland WIP (because

of upstream sediment loads from Maryland to the Anacostia and Potomac Rivers), EPA must classify the Maryland WIP as seriously deficient as well.

4. EPA Backstop Allocations: EPA says that its backstop measures are federal actions that the agency "is prepared to take" if jurisdictions do not meet milestones on schedule. EPA must go further and make clear that it <u>will</u> take the backstop actions, along with any additional actions needed to assure compliance with a milestone, within 60 days of any milestone missed by the state. Failure to so commit would be inconsistent with 33 U.S.C. 1313(d)(2).

Furthermore, EPA needs to make crystal clear to the states that it will formally object to any NPDES permits that do not fully implement the Bay TDMLs and related WIP provisions through enforceable pollution limits within the required time frames, and that it will withdraw NPDES permitting authority from any state that fails to timely implement these requirements. EPA must make clear in the TMDL that milestones are binding, enforceable requirements of the Clean Water Act that must be adhered to in all permitting decisions.

5. Legal Requirements for TMDLs: At several points, the proposed TDML document misleadingly asserts that TMDLs are primarily "informational tools." E.g., p. 1-11. EPA bases this mischaracterization on an out-of-context quotation from the decision in *Pronsolino v. Nastri*, 291 F.3d 1123 (9th Cir. 2002). In reality, the *Pronsolino* Court acknowledged that TMDLs are mandatory limits on pollution loadings:

For waters identified pursuant to § 303(d)(1)(A)(the "§ 303(d)(1) list"), the states must establish the "total maximum daily load" ("TMDL") for pollutants identified by the EPA as suitable for TMDL calculation.2 § 303(d)(1)(C). "A TMDL defines the specified maximum amount of a pollutant which can be discharged or 'loaded' into the waters at issue from all combined sources." *Dioxin/Organochlorine Center v. Clarke*, 57 F.3d 1517, 1520 (9th Cir. 1995). The TMDL "shall be established at a level necessary to implement the applicable water quality standards...." [33 U.S.C.] § 303(d)(1)(C).

291 F.3d at 1127-28 (emphasis added).

On page 1-13, EPA states:

[W]here impaired waters have been identified on jurisdictions' section 303(d) lists for many years, where the states in question have decided not to establish their own TMDLs for those waters, where EPA is establishing a TMDL for those waters at the direction of, and in cooperation with, the jurisdictions in question, **and** where those waters are part of an interrelated and interstate water system like the Chesapeake Bay that is impaired by pollutant loadings from sources in seven different jurisdictions, CWA section 303(d) authorizes EPA authority to establish that TMDL.

(emphasis added). To accurately reflect applicable law, the highlighted "and" in the above quote needs to be changed to "or." Where, for example, a state has decided not to establish TMDLs for impaired waters, EPA is obliged to adopt federal TMDLs under section 303(d) regardless of whether the other circumstances listed in the quote exist. Likewise, a failure by a state to submit TMDLs for an impaired water over a number of years warrants EPA adoption of federal TMDLs – again regardless of whether the other above-described circumstances are present. Here, EPA is plainly obligated to adopt the Bay TMDLs by the longstanding failure of the Bay states to adopt adequate TDMLs on their own. The other factors cited by EPA are additional justifications for adopting these TDMLs.

6. Critical Conditions: EPA's initial analysis found that 1996-98 represented the highest streamflow period for the Chesapeake Bay draining during the 1991-2000 hydrology period. TMDL at 6-3 to -4. However, EPA is proposing to reject use of 1996-98 for TMDL modeling because this 3-year period represented a "high-flow period" that would generally occur once every 20 years. EPA does no offer a reasoned explanation of why that fact disqualifies 1996-98 as the reference critical flow period, and no rational explanation appears to exist. A twenty year period is hardly an excessive time frame for gauging

critical flows, particularly give that EPA is proposing to allow the states 15 years to implement the Bay TMDLs. Moreover, EPA itself acknowledges elsewhere in the document that climate change induced by greenhouse gas emissions is likely to lead to increases in rainfall in the Bay region, making the 1996-98 period more, not less representative.

- 7. Proposal to Weaken Water Quality Standards: On pages 6-4 to -5 of the TMDL document EPA attempts to justify weaker water quality standards and TMDLs than called for by modeling as necessary to meet current standards. At least part of the justification proffered is that weaker standards are needed because otherwise substantially greater load reductions would be required. Such a rationale is not a lawful or rational basis for relaxing water quality standards. Under EPA's water quality standards rules, 40 CFR Part 130, standards must be sufficiently stringent to protect designated uses, regardless of the ease or difficulty of achieving such standards. Further, a downgrading of designated uses is not allowed unless the state prepares a sufficient use attainability demonstration showing that one or more uses is not an existing use and cannot be attained based on the one of the showings required in EPA's rules. The TMDL proposal makes no such showing, and in its absence, EPA cannot approve relaxed water quality standards as proposed.
- **8. Margin of Safety:** EPA's proposal to rely on an "implicit" margin of safety for the nutrients TDMLs is unlawful and irrational. The Act requires each TMDL to be set "at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality." 33 U.S.C. 1313(d)(1)(C). The statute is therefore precautionary in nature, requiring EPA to explicitly (not implicitly) provide for a margin of safety.

Even if an "implicit" margin of safety was allowable, EPA has failed to rationally justify its claim that the proposed TMDLs provide such a margin. First, reliance solely on an "implicit" margin of safety that is neither measurable nor verifiable provides no rational basis for determining that the statutory test for a margin of safety has been met. The agency asserts that an implicit margin of safety is provided by virtue of various allegedly conservative assumptions used in the modeling, but fails to quantify the alleged benefit of those assumptions in providing a margin of safety (as opposed to simply avoiding making TMDLs that are less protective than necessary from being even more deficient).

Second, the margin of safety must be sufficient to account for any lack of knowledge or uncertainty involved in developing the TMDL. 33 U.S.C. § 1313(d)(C). The uncertainties and knowledge gaps involved in developing the Chesapeake Bay TMDL are enormous given the scale and complexity of the watershed. Yet EPA has conducted no formal analysis, either by systematically identifying the uncertainties and lack of knowledge involved in developing these TMDLs or by otherwise estimating the model's margin of error, that would allow determination of whether the implicit margin of safety claimed in the Draft TMDL is sufficiently conservative to take into account "any lack of knowledge concerning the relationship between effluent limitations and water quality," as is required under § 303(d)(1)(C) of the CWA and the TMDL regulations at 40 C.F.R. § 130.7(c)(1). Because there is no analysis connecting the existing lack of knowledge with the claimed margin of safety, there is no showing or reasoned demonstration that the margin of safety is adequate.

Finally, the Draft provides no explanation or analysis demonstrating that each of the claimed "conservative assumptions" actually create a margin of safety. To the contrary, EPA acknowledges (at 6-11) that even with these assumptions, the model projects DO criteria nonattainment across a wide range of segments and designated uses. The agency excuses these continued violations simply by ignoring nonattainment percentages projected by the model rounded to 1 percent – hardly a conservative approach. Even then, the agency projects the nutrient TMDLs will still result in DO nonattainment in one Bay segment. TMDL at 6-13. See also Table 6-7 (showing continued nonattainment in 9 segments under the proposed TMDL); page 6-40 (indicating that model showed nonattainment of Anacostia and Potomac Rivers for chlorophyll a under proposed TMDL).

EPA also cites as "conservative" its reliance on a 3-year period that allegedly represents 10 year high-flow conditions (an assumption that we question above in relation to critical conditions), but again fails to show why use of that period is inherently conservative or actually results in a TMDL that is more

protective than necessary to implement standards. Moreover, the requirement for TMDLs to include a margin of safety is a stand-alone requirement of the CWA, 33 U.S.C. § 1313(d)(C). That statutory requirement must be satisfied *in addition to* the requirement in CWA regulations for TMDLs to include a margin of safety *and* "take into account critical conditions," 40 C.F.R. § 130.7(c)(1). In other words, meeting the "critical conditions" requirement cannot itself be counted as a margin of safety.

Equally meritless is EPA's claim that a margin of safety derives from the fact that NPDES permit holders can be expected to discharge lower pollution levels than their permitted maxima. This assumption is patently invalid because it disregards countervailing evidence, including the fact that population increases in the Bay watershed (along with the inevitable growth in construction and industrial development) are projected to grow substantially during the TMDL implementation period. *See*, *e.g.*, discussion at 2-5. Even if that assumption was verified (which it is not), it hardly justifies an assumption that the TMDL itself is more protective than necessary, particularly when EPA is proposing to allow the use of trading, and when EPA cannot assure that many other dischargers (e.g., MS4 systems, nonpoint sources) will discharge at levels lower (or even at) the levels assumed in the model.

- **9. Air Deposition:** EPA assumes a 15.7 million pound nitrogen deposition cap based on assumed national EPA rulemakings between now and 2020. TMDL at 6-32. A number of these rules have yet to be adopted, however, and some might be changed before 2020. If EPA is going to allow the states to assume this limit on air deposition, the agency must adopt enforceable mechanisms to assure that they are in fact achieved, or that states are required to cut their load allocations by the amount of any shortfall in the hoped for air deposition reductions.
- **10. MS4 Systems:** Although MS4s are major contributors to standards violations in the Bay, EPA's draft TDML does not appear to assign WLAs to specifically named MS4 systems (e.g., identified by name of municipality and by NPDES permit number). Appendix R does appear to assign WLAs to MS4s on various segments, but identification of the specific systems and outfalls covered by those allocations is essential to comply with EPA's rules. See 40 C.F.R. 130.2(h)(defining Wasteload Allocation as the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution). Because some stream segments have multiple MS4 discharge points, it is particularly important that WLAs be assigned to individual municipal dischargers by name.
- 11. Offsets: EPA's proposal to authorize offsets to facilitate new or increased pollutant loadings to already-impaired waters is unlawful, arbitrary, and very poorly thought out. The Act and EPA provide no authority for offsets. Instead, they direct the establishment of TMDLs, comprised of WLAs and LAs. As noted above, a WLA is to be assigned in the TMDL to an individual point source. If EPA or a state wants to reallocate WLAs in any manner, they must do so by revising the TMDL through a public notice and comment process, not via some sort of ad hoc or case-by-case "offset" process that is not authorized by the Act or EPA rules, and that seeks to circumvent legally adopted WLAs and LAs.

EPA's guidelines for offsets are also unlawful because they provide no assurance that the loading limits required by the Act will be maintained at all times. The proposed guidelines in Appendix S fail to clear and explicit safeguards sufficient to prevent fictitious or overstated pollution reductions from being used as offsets. For example, the proposal appears to contemplate that nonpoint sources will be eligible to be credit generators, but sets no minimum monitoring requirements for such sources that would ensure verification that baselines and reductions from baselines are truly bona fide. Appendix S proposes only a vague requirement for "appropriately quantifying" credits and assuring equivalency, without specifying how. This creates a major risk of reliance on unreliable or unproven estimation techniques that vary wildly from case to case, and that EPA will lack the resources to oversee or validate. Moreover, EPA identifies no mechanism for monitoring or enforcing pollutant reductions used by nonpoint sources to generate credits. Allowing the use of such unenforceable reductions to effectively authorize point source increases that would otherwise violate the Act is itself flatly unlawful, as it effectively converts an enforceable effluent limitation into an unenforceable one. Furthermore, any attempt to allow an existing NPDES permitting to increase its pollution discharge without an permit amendment would violate the Act and EPA's rules, which require formal permit amendment to authorize pollution increases. EPA vaguely suggests various safeguards to protect local receiving water quality, but Appendix S appears to contemplate that the process for providing such protection could occur outside the NDPES permitting or

amendment process, therefore illegal diluting the protection provided by existing rules to ensure protection of water quality standards.

Aside from their illegality, EPA cites no factual or reasoned basis for concluding that either the agency or the states can lawfully and effectively implement and oversee an offset program of the sort being proposed here. The agency cites no experience in administering a program of this magnitude, offers no estimate of the resources required from the agency and states to properly implement it, and provides no rational basis for concluding that EPA and states are capable of doing the job right.

12. Trading: The above analysis of the illegality and arbitrariness of EPA's offset proposal applies with even greater force to EPA's suggestion (at 10-3 to -4) that inter-source (and inter-segment) trading should be allowed. There is no legal authority for such trading, and allowing it would undermine the enforceability and integrity of the entire Bay TMDL. As with offsets, a trading scheme raises the specter of nonpoint sources trading credits generated by unenforceable and unverifiable pollution cuts to allow pollution increases that otherwise would be forbidden (at risk of enforcement action by EPA or citizens). If the past decades of taught us anything about cleaning up the Bay, it is that we need stronger and more enforceable pollution limits, not weaker limits that can by circumvented and undermined by trading shell games. Furthermore, as with offsets, EPA cites no reasoned basis that either the agency or the states have the resources to adequately track and police trades involving potentially hundreds of sources throughout all of the Bay states.

Sincerely,

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